

## State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-3406 FAX (603) 271-7894



May 18, 2001

Letter of Deficiency DAM #036.08

Mr. Scott Klang Enfield Water Department Main Street Enfield, NH 03748-0373

RE: Enfield Reservoir Dam, Canaan

Dear Mr. Klang:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that plays a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on October 3, 2000. During this visual inspection and/or file review, the following deficiencies were observed:

- 1. There was brush along the spillway abutments and in the floor of the emergency spillway that needs removal;
- 2. Seepage was noted on the exterior right spillway-training wall. This seepage was noted in 1963 and measured as 20 gpm;
- 3. There was seepage noted at the toe of the dam at the directional change in the alignment of the dam, approximately 100 feet from the right abutment. This was noted in the 1979 ACOE report. In 1963 a concrete core wall was installed within the southwest portion of the dam in an attempt to stop this seepage;
- 4. There was leakage noted in the vicinity of the low level outlet;
- 5. There is no emergency action plan on file. It is our understanding that this document is in progress; and
- 6. There is no operation and maintenance plan on file with the DES.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

## July 2, 2001:

1. Remove the trees and brush in the vicinity of the spillway abutments, as well as from the emergency spillway. The emergency spillway should be restored to its original 33-foot length by removing brush and debris within a 35' radius from the right end of the primary spillway. Refer to the attached plan;

http://www.state.nh.us

TDD Access: Relay NH 1-800-735-2964

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2. Prepare and submit to the DES a written operational procedure plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel;

## November 1, 2001:

- 3. Investigate the source of seepage on the exterior right spillway-training wall and repair;
- 4. Investigate the source of seepage noted in the vicinity of the low-level outlet and repair; and
- 5. Monitor the areas of seepage noted along the toe of the dam at the directional change in the alighment of the dam. Install a weir to measure the seepage. Keep a formal log to record the seepage measurements. An example log sheet has been attached for your reference.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,

Grace E. Levergood, P.E. Dam Safety Engineer

Attachments DB8, DB13, Guideline for an O&M plan

cc: Gretchen Rule

Town of Canaan

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